

CUTANEOUS ADMINISTRATION SYSTEM

ABSTRACT OF THE DISCLOSURE

Bioactive agents are cutaneously delivered by a jet dispenser using inkjet technology, such as that used in printing. The dispenser propels precise volumes of bioactive agent toward the skin, where they exert a local or topical effect, or move through the skin for transdermal systemic delivery. Drugs are either delivered directly to the skin, or are introduced into a transdermal patch, which may receive repeated dosages. A controller in the dispenser may control delivery of multiple different drugs, timing of drug administration, or change drug regimens in response to a changing medical condition of a patient, such as those monitored by a sensor in communication with the controller, for example to prevent an overdose. The dispenser may act as an electromechanical patch, capable of long term administration of drugs to the skin, to achieve local or systemic pharmaceutical effects. Administration methods are also provided, along with replacement kits.